

	Field	Acres	Buffer	Net Ac.	Latitude	Long.	FSN#	Tract	Field	Tax ID #	RPC#
Calvin Godsey	RO82-1	17.2	6.8	10.4	37.180	-79.674	4962	7653	1	208 7 9	20805309
										208 7 10	20805310
										208 7 11	20805311
	RO82-2	25.4	7.6	17.8	37.178	-79.674	4962	7653	2-3	208 7 11	20805311
										220 A 21D	22002102
	RO82-3	9.7	3.1	6.6	37.177	-79.673	4962	7653	2	208 7 11	20805311
										220 A 21D	22002102
	RO82-4	3.6	2.3	1.3	37.178	-79.670	4962	7654	12	209 A 8	20901100
										220 A 21G	90511238
	RO82-5	23.3	8.8	14.5	37.177	-79.668	4962	7654	14, 19	209 A 8	20901100
										220 A 21G	90511238
	RO82-6	20.5	10.6	9.9	37.181	-79.666	4962	7654	8, 14	209 A 8	20901100
										209 A 8A	90507276
	RO82-7	13.8	0.6	13.2	37.177	-79.666	4962	7654	6, 19	209 A 8A	90507276
	RO82-8	12.3	4.1	8.2	37.179	-79.664	4962	7654	20-21	209 A 8A	90507276
	RO82-9	27.6	16.1	11.5	37.176	-79.660	2508	2321	1-5	221 A 3	22100200
	RO82-10	7.7	2.3	5.4	37.174	-79.661	2508	2321	6	221 A 3	22100200
	RO82-11	45.1	17.3	27.8	37.175	-79.655	2508	2321	7	221 A 3	22100200
	RO82-12	6.0	2.4	3.6	37.176	-79.653	2508	2321	8	221 A 3	22100200
	TOTALS	212.2		130.2							

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11/23/2015 between L. Calvin Goosey referred to here as "Landowner", and BIO-NOMIE SVC referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Redford City, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
208 7 11	20809311		
209 A 8	20901100		
220 A 21G	90511238		
209 A 8A	90507276		
221 A 3	72100200		

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids Water treatment residuals Food processing waste Other industrial sludges
☒ Yes ☐ No ☐ Yes ☒ No ☐ Yes ☒ No ☐ Yes ☒ No

Lauren Calvin Goosey SR S. Chubsky 1275 AUTUMN HILLS DR MONROE
Landowner - Printed Name, Title Signature Mailing Address VA 24121

Permittee:

BIO-NOMIE SVC, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Wendell "Buck" Stevenson Donald Stevenson for us 516 Rowntree Rd
Permittee - Authorized Representative Signature Mailing Address Charlotte, NC 28217
Printed Name

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services Inc County or City: Bedford County
Landowner: L. Calvin Godsey

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil.
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

L. Calvin Godsey
Landowner's Signature

11-23-15
Date

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11/23/2015 between Tammy Godsey referred to here as "Landowner", and Bio-Nomic Services, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Redford City, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID		Tax Parcel ID	
208	7 11	20805311	
209	A 8	20901100	
220	A 2/G	90511238	
209	A 8A	90507276	
221	A 3	22100200	

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids Water treatment residuals Food processing waste Other industrial sludges
☒ Yes ☐ No ☐ Yes ☒ No ☐ Yes ☒ No ☐ Yes ☒ No

Tammy B. Godsey Tammy B. Godsey 1275 Autumn Hills Dr.
Landowner - Printed Name, Title Signature Mailing Address
Moneta VA 24121

Permittee:

Bio-Nomic Services, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Vaughn "Buck" Stevenson Ronald H. Green 516 Rowntree Ad
Permittee - Authorized Representative Signature Mailing Address
Printed Name Charlotte, NC 28217

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services County or City: Bedford County
Landowner: Tammy S. Godsey

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Tammy S. Godsey
Landowner's Signature

12-8-2015
Date

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11/13/2019 between Garland L. Simmons referred to here as "Landowner", and Bi-Nomic Inc., referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Bedford Ctr, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
208 7 9	20805309		
208 7 10	20805310		
220 A 210	22002102		

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<u>Garland L. Simmons</u>	<u>Garland L. Simmons</u>	<u>1198 Horseshoe Rd</u>
Landowner - Printed Name, Title	Signature	Mailing Address

Permittee:

Bi-Nomic Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

<u>Lauren "Buck" Stevenson</u>	<u>Donald Greasefor US</u>	<u>576 Roundtree Rd</u>
Permittee - Authorized Representative	Signature	Mailing Address
Printed Name		<u>Charlotte, NC 28217</u>

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services
Landowner: Garland L. SIMMONS

County or City: Bedford County

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Garland L. Simmons
Landowner's Signature

11-13-15

Date

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11/13/2015 between Carolyn P. Simmons referred to here as "Landowner", and Bio-Nomic, Inc. referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Bedford City, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
208 7 9	20805309		
208 7 10	20805310		
220 A 210	22002102		

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<u>Carolyn P. Simmons</u>	<u>Carolyn P. Simmons</u>	<u>10247 Streetsville Rd</u>
Landowner - Printed Name, Title	Signature	Mailing Address

540-309-3944

Permittee:

Bio-Nomic, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

<u>Vaughn "Buck" Stevenson</u>	<u>Donald H. Greenleaf</u>	<u>516 Rowntree Rd</u>
Permittee - Authorized Representative	Signature	Mailing Address
Printed Name		<u>Charlotte, NC 28217</u>

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services
Landowner: Carolyn P. Simmons

County or City: Bedford County

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Carolyn P. Simmons
Landowner's Signature

11-13-13
Date

[Search](#)[Details](#)[Map](#)[Contact](#) | [GIS Page](#) | [Log On](#)[Printer-Friendly](#)[View In Map](#)**Tax Map #**

208 7 9

Link

208 7 9

Parcel Number(RPC)

20805309

Address[Link to Real Estate Lookup/Sketch](#)**Parcel Information**[Valuation](#)[Improvements](#)[Ownership History](#)**General Information****Owner:**SIMMONS GARLAND L & SIMMONS
CAROLYN**Legal Acreage:**

11.7300

Additional Owner:

C/O LAUREN C GODSEY SR

PCDesc:

2 Single Family Res(1-19.99ac)

Owner Address:1275 AUTUMN HILLS DR
MONETA, VA 24121**Legal Description:**

TRACT 1 PB 54/86

Document Number:

030004083

Land Use**Tax Year:** 1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

PART 2082-1

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

PART 2082-1



Feet
0 200 400 600 800
1:9,028 / 1"=752 Feet

Title: Simmons, Garland and Carolyn 208 7 9 20805309

Date: 3/15/2016

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

[Search](#)[Print](#)[Details](#)[Map](#)[Contact](#) | [GIS Page](#) | [Log On](#)[Printer-Friendly](#)[View In Map](#)**Tax Map #**

208 7 10

Link

208 7 10

Parcel Number(RPC)

20805310

Address[Link to Real Estate Lookup/Sketch](#)[Parcel Information](#)[Valuation](#)[Improvements](#)[Ownership History](#)**General Information****Owner:**SIMMONS GARLAND L & SIMMONS
CAROLYN**Legal Acreage:**

7.1300

Additional Owner:

C/O LAUREN C GODSEY SR

PCDesc:

2 Single Family Res(1-19.99ac)

Owner Address:1275 AUTUMN HILLS DR
MONETA, VA 24121**Legal Description:**

TRACT 3 PB 54/86

Document Number:

030004083

Land Use**Tax Year:** 1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

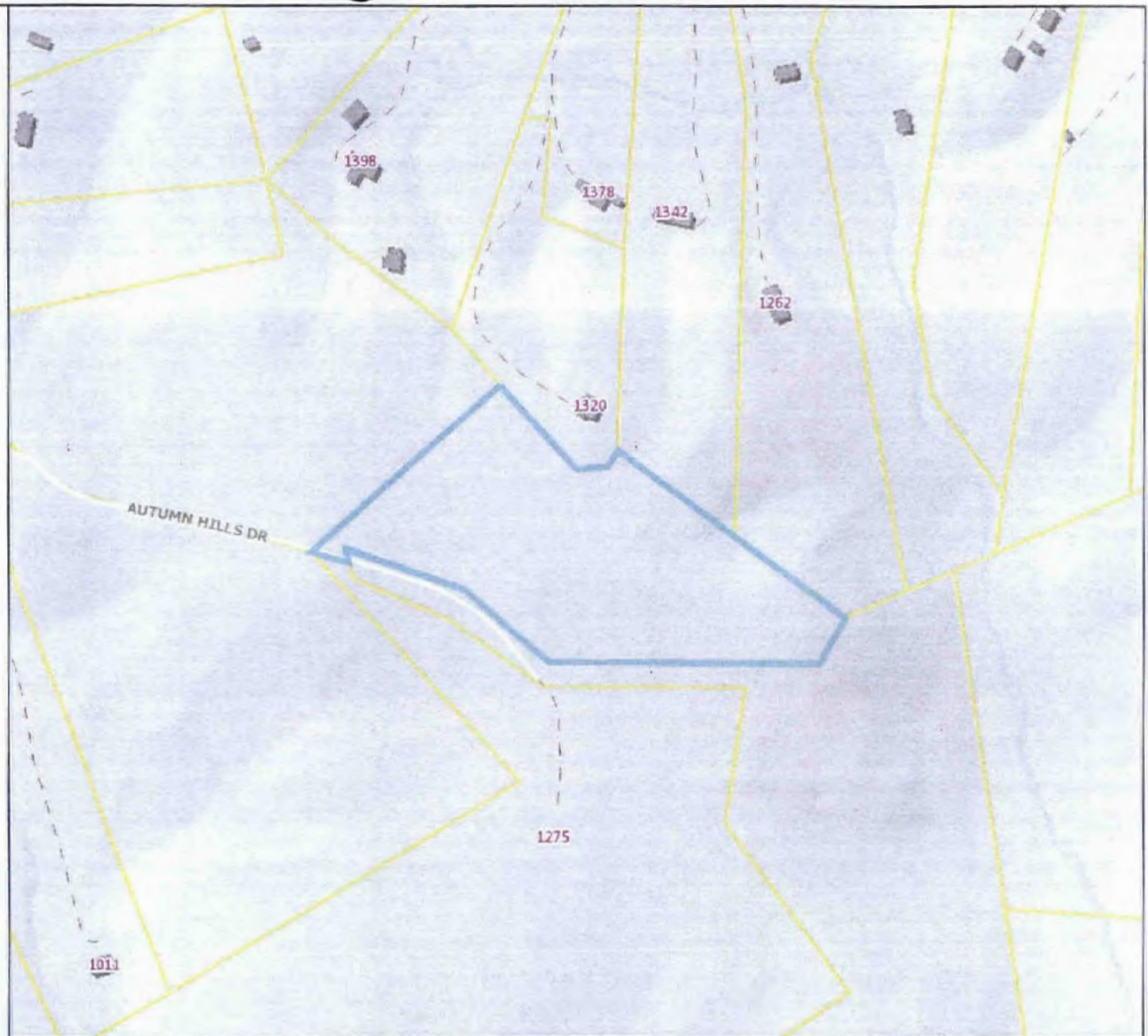
PART 2082-1

Bedford, VA

Legend

- E911 Address
- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Driveway
- Parcels - County
- Parcels - Town
- Public School Boundary

PART 2082-1



Feet

0 100 200 300 400
1:4,514 / 1"=376 Feet

Title: Simmons, Garland and Carolyn 208 7 10 20805310



Date: 3/15/2016

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Search

Details

Map

[Contact](#) | [GIS Page](#) [Log On](#) [Printer-Friendly](#)[View In Map](#) **Tax Map #**

208 7 11

Link

208 7 11

Parcel Number(RPC).

20805311

Address

1275 AUTUMN HILLS DR

[Link to Real Estate Lookup/Sketch](#)**Parcel Information****Valuation****Improvements****Ownership History****General Information****Owner:**GODSEY LAUREN C SR & GODSEY
TAMMY S**Legal Acreage:**

36.0800

Additional Owner:**PCDesc:**

5 Agricultural/Undeveloped(20-99ac)

Owner Address:1275 AUTUMN HILLS DR
MONETA, VA 24121**Legal Description:**

AUTUMN HILLS TRACT 4 PB 54/86

Document Number:

140002081

Land Use**Tax Year:**2007
2008
2009
2010
2011
2012
2013
2014
2015
2016

PART R082-1

PART R082-2

PART R082-3

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

PART R082-1

PART R082-2

PART R082-3




Title: Godsey, Lauren Sr. and Tammy 208 7 11 208053111

Date: 3/15/2016

Feet
0 500 1000 1500 2000
1:18,056 / 1"=1,505 Feet

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

[Search](#)[Details](#)[Map](#)[Contact](#) | [GIS Page](#) [Log On](#) [Printer-Friendly](#)[View In Map](#) 

Tax Map #	Link	Parcel Number(RPC)	Address
220 A 21D	220 A 21D	22002102	

[Link to Real Estate Lookup/Sketch](#)

[Parcel Information](#)[Valuation](#)[Improvements](#)[Ownership History](#)**General Information**

Owner:	SIMMONS GARLAND L & SIMMONS CAROLYN	Legal Acreage:	33.6600
Additional Owner:	C/O LAUREN C GODSEY SR	PCDesc:	5 Agricultural/Undeveloped(20-99ac)
Owner Address:	1275 AUTUMN HILLS DR MONETA, VA 24121	Legal Description:	TRACT 5 PB 54/86
		Document Number:	070017058

Land Use**Tax Year:**

1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016

PART 1082-2

Bedford, VA

Legend

Highway

— Blue Ridge Parkway

US Primary

Virginia Primary

Roads

Parcels - County

Parcels - Town

Public School Boundary

PART 2082-2

Feet

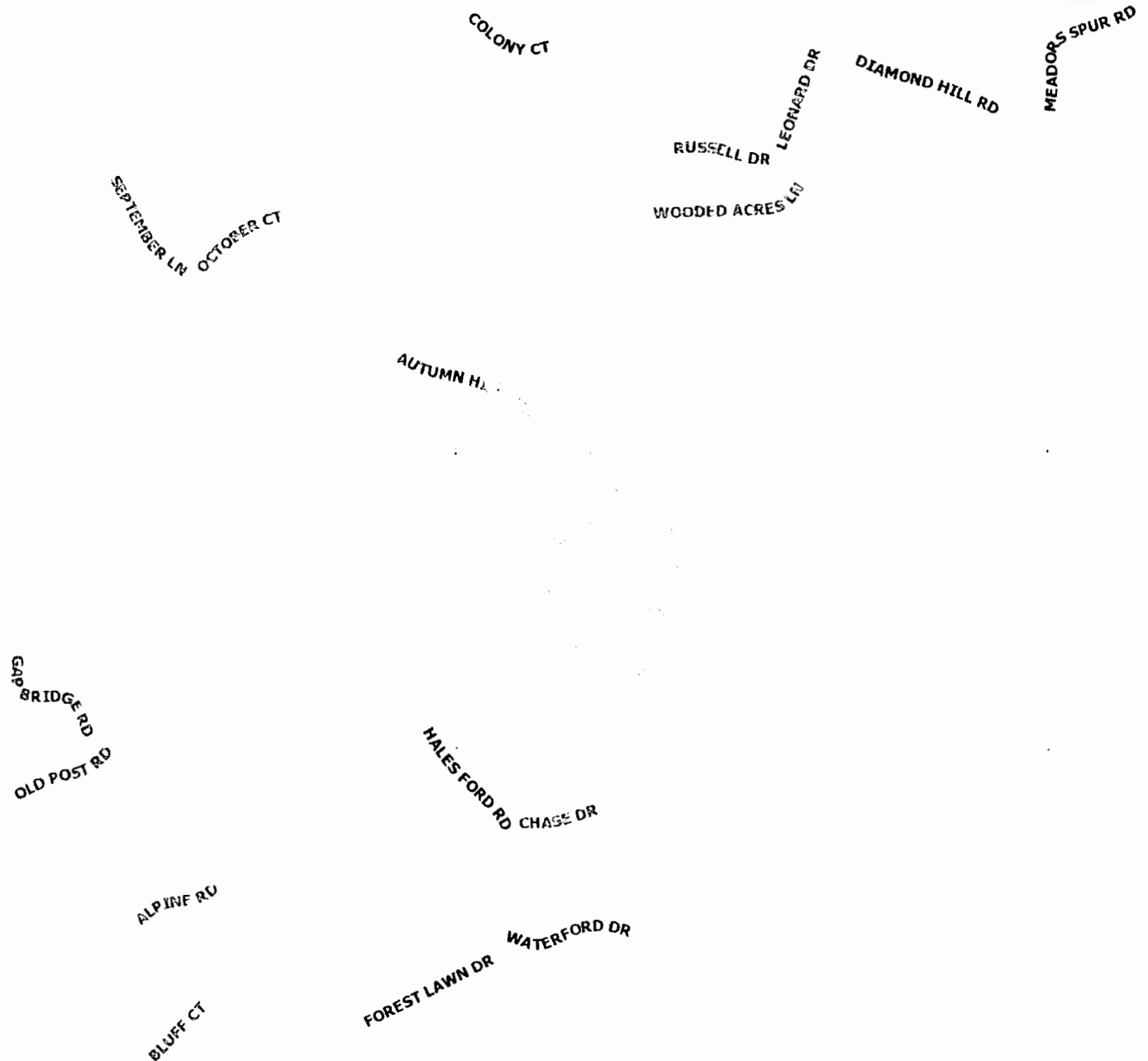
0 500 1000 1500 2000
1:18,056 / 1"=1,505 Feet



Title: Simmons, Garland and Carolyn 220 A 21D

Date: 3/15/2016

22002102

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.



[Search](#)[Details](#)[Map](#)[Contact](#) | [GIS Page](#) [Log On](#) [Printer-Friendly](#)[View In Map](#) **Tax Map #**

209 A 8

Link

209 A 8

Parcel Number(RPC).

20901100

Address[Link to Real Estate Lookup/Sketch](#)**Parcel Information****Valuation****Improvements****Ownership History****General Information****Owner:**

GODSEY LAUREN C SR & TAMMY S

Legal Acreage:

32.6800

Additional Owner:**PCDesc:**

5 Agricultural/Undevl(20-99ac)

Owner Address:1275 AUTUMN HILLS DR
MONETA, VA 24121**Legal Description:**

TRACT 7 PB 54/86

Document Number:

120012606

Land Use**Tax Year:**1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016PART R082-4
PART R082-5
PART R082-6

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

PART R082-4
PART R082-5
PART R082-6





Feet
0 500 1000 1500 2000
1:18,056 / 1"=1,505 Feet

Title: Godsey, Lauren Sr. and Tammy 209 A 8 20901100

Date: 3/15/2016

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

[Search](#)[Details](#)[Map](#)[Contact](#) | [GIS Page](#) | [Log On](#) [Printer-Friendly](#)[View In Map](#) **Tax Map #**

220 A 21G

Link

220 A 21G

Parcel Number(RPC).

90511238

Address[Link to Real Estate Lookup/Sketch](#)**Parcel Information****Valuation****Improvements****Ownership History****General Information****Owner:**

GODSEY LAUREN C SR & TAMMY S

Legal Acreage:

38.2000

Additional Owner:**PCDesc:**

5 Agricultural/Undeveloped(20-99ac)

Owner Address:1275 AUTUMN HILLS DR
MONETA, VA 24121**Legal Description:**

TRACT 6 PB 54/86

Document Number:

120012606

Land Use**Tax Year:** 2013

2014

2015

2016

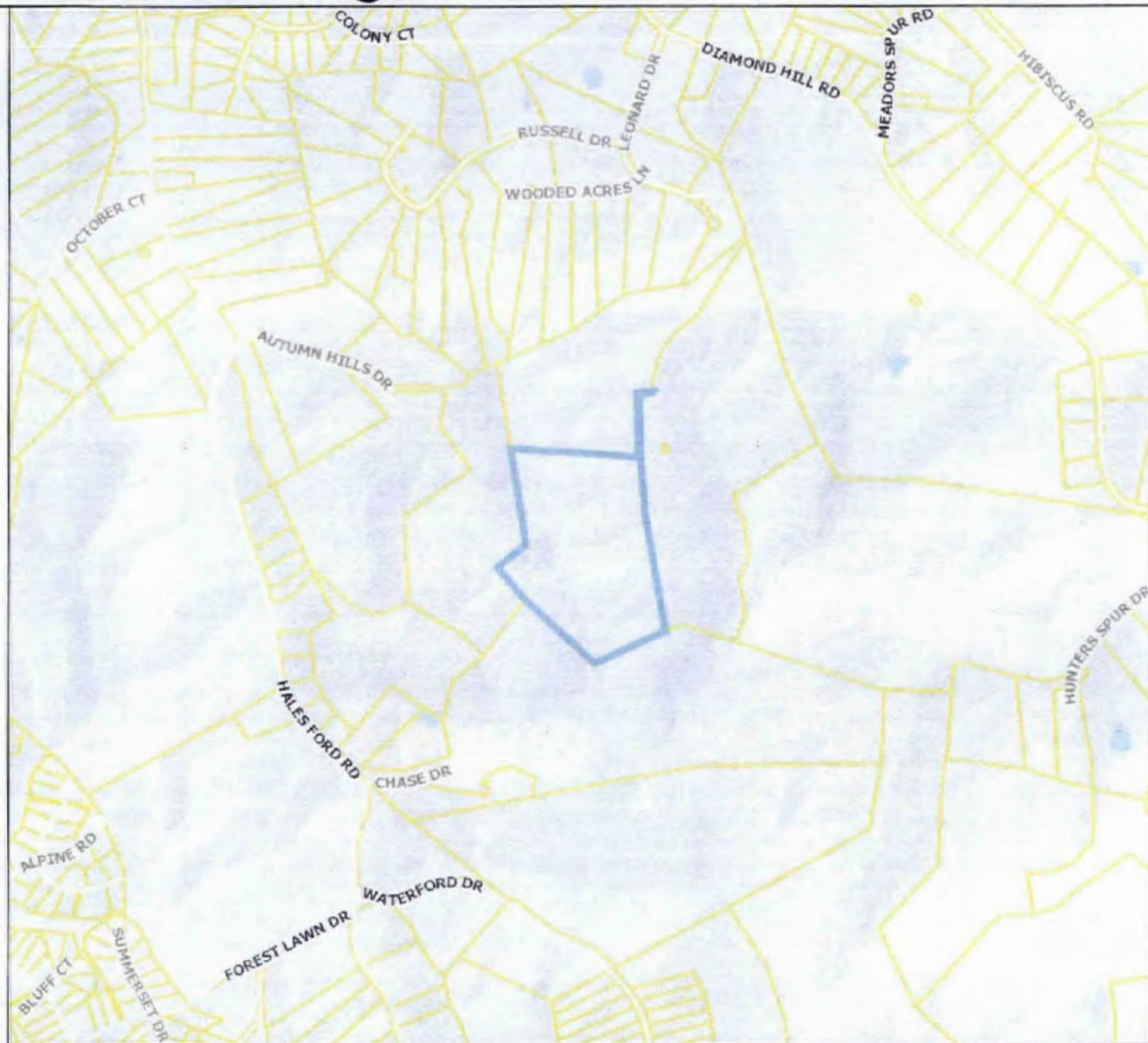
PART R082-4
PART R082-5

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

PART 2082-4
PART 2082-5



Feet
0 500 1000 1500 2000
1:18,056 / 1"=1,505 Feet

Title: Godsey, Lauren Sr. and Tammy 220 A 21G

Date: 3/15/2016

90511238

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

[Search](#)[Parcels](#)[Details](#)[Map](#)[Contact](#) | [GIS Page](#) | [Log On](#)[Printer-Friendly](#)[View In Map](#)**Tax Map #**

209 A 8A

Link

209 A 8A

Parcel Number(RPC).

90507276

Address[Link to Real Estate Lookup/Sketch](#)**Parcel Information****Valuation****Improvements****Ownership History****General Information****Owner:**

GODSEY LAUREN C SR & TAMMY S

Legal Acreage:

60.3100

Additional Owner:**PCDesc:**

5 Agricultural/Undevl(20-99ac)

Owner Address:1275 AUTUMN HILLS DR
MONETA, VA 24121**Legal Description:**

TRACT 8 PB 54/86

Document Number:

120012606

Land Use**Tax Year:**2007
2008
2009
2010
2011
2012
2013
2014
2015
2016PART R082-6
R082-7
R082-8

Bedford, VA

Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town

PART R082-6
R082-7
R082-8



Title: Godsey, L. Calvin Sr & Tammy S 209 A 8A


Date: 5/16/2016

90507276

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Feet

0 500 1000 1500 2000
1:18,056 / 1"=1,505 Feet

[Search](#) [Results](#) [Details](#) [Map](#)[Contact](#) | [GIS Page](#) [Log On](#) [Printer-Friendly](#)[View In Map](#) 

Tax Map #	Link	Parcel Number(RPC)	Address
221 A 3	221 A 3	22100200	3401 DIAMOND HILL ROAD

[Link to Real Estate Lookup/Sketch](#)

[Parcel Information](#)[Valuation](#)[Improvements](#)[Ownership History](#)**General Information**

Owner:	GODSEY CALVIN & GODSEY TAMMY	Legal Acreage:	107.8800
Additional Owner:		PCDesc:	6 Agricultural/Undeveloped(100+ac)
Owner Address:	1275 AUTUMN HILLS DR MONETA, VA 24121	Legal Description:	HALES CR
		Document Number:	140004364

Land Use**Tax Year:** 1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

R082-9

R082-10

R082-11

R082-12

Bedford, VA

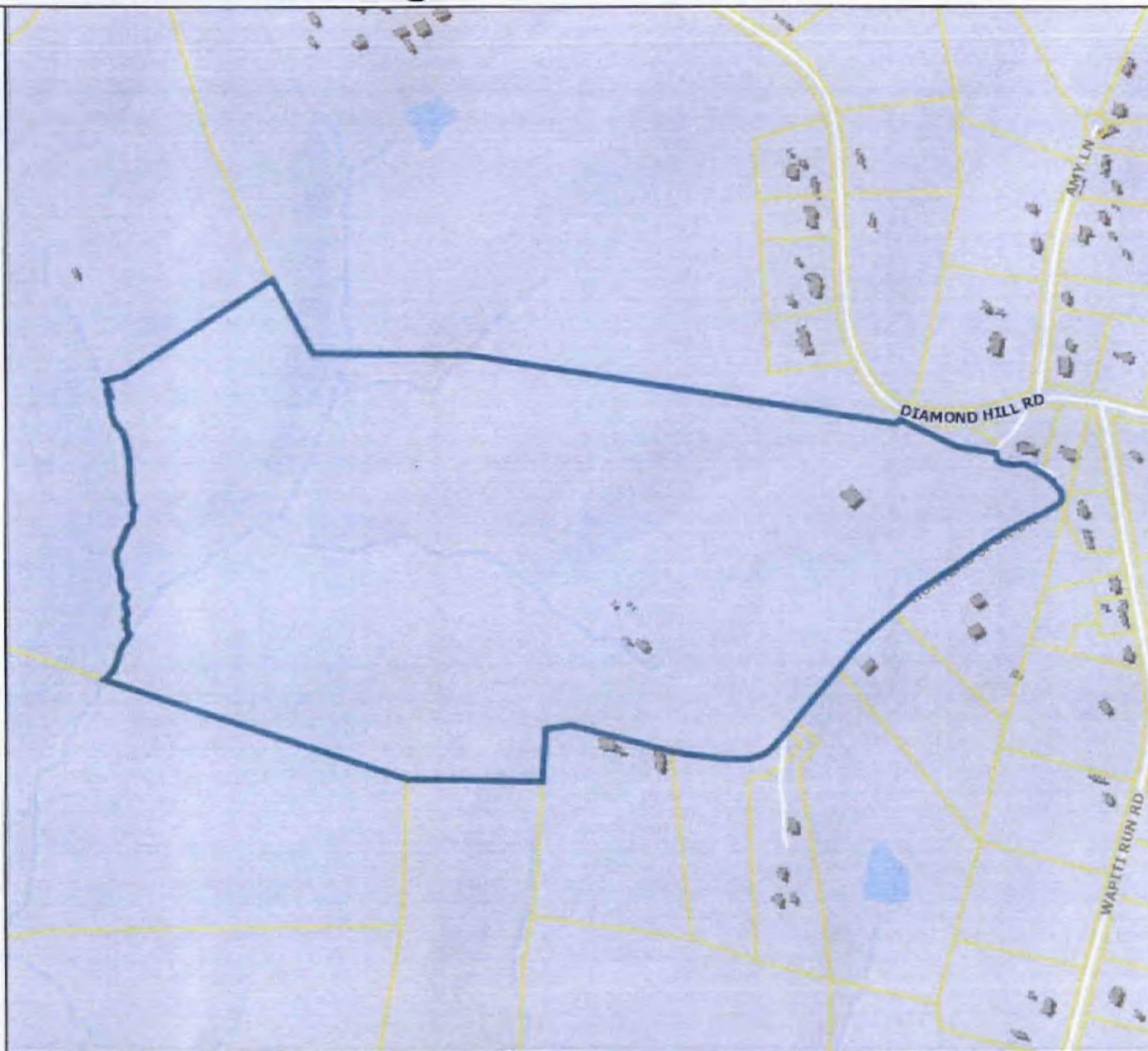
Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town
- Public School Boundary

R082-9
R082-10
R082-11
R082-12

Feet

0 200 400 600 800
1:9,028 / 1"=752 Feet



Title: Godsey Calvin & Tammy 221 A 3 22100200

Date: 6/8/2016

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Landowner Coordination Form

This form is used by the Permittee to identify properties (tax parcels) that are authorized to receive biosolids and/or industrial residuals, and each of the legal landowners of those tax parcels. A *Land Application Agreement - Biosolids and Industrial Residuals* form with original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee: Bio-Nomic Services Inc
County or City: Bedford County

Please Print

(Signatures not required on this page)

[illegible]

Calvin Godsey Farm

Bio-Nomic Services, Inc. is filing this application to apply approved (VA0025020) Class B biosolids to this designated farm land in Bedford County, Virginia.

The farm is located in the Moneta community and extends between the Hales Ford Road and Diamond Hill Road near Diamond Hill Store in a predominately agricultural area. All streams, drainage features, rock outcrops, structures, dwellings, property lines, roadways and wells are designated and buffered as required. There are no public contact sites in the vicinity of the farm. Biosolids are currently being used as crop nutrients on close by farms.

Mr. Godsey operates his acreage for hay production or pasture. The grass cover in the hayfields/ pastures is predominately fescue.

The current fescue hay fields are: RO 82-2, 82-7.

The current fescue pastures are: RO 82-1, 82-3, 82-4, 82-5, 82-6, 82-8, 82-9, 82-10, 82-11, & 82-12.

Nutrient Management Plans will be written by a certified plan writer to address the application of biosolids to the designated fields that will address the most recent planned use of the fields should any changes occur in agricultural practices.



Ⓐ **Brownlee Ave SE, Roanoke, VA 24014**

Ⓑ **Leonard Dr, Moneta, VA 24121**

46 min, 21.7 mi

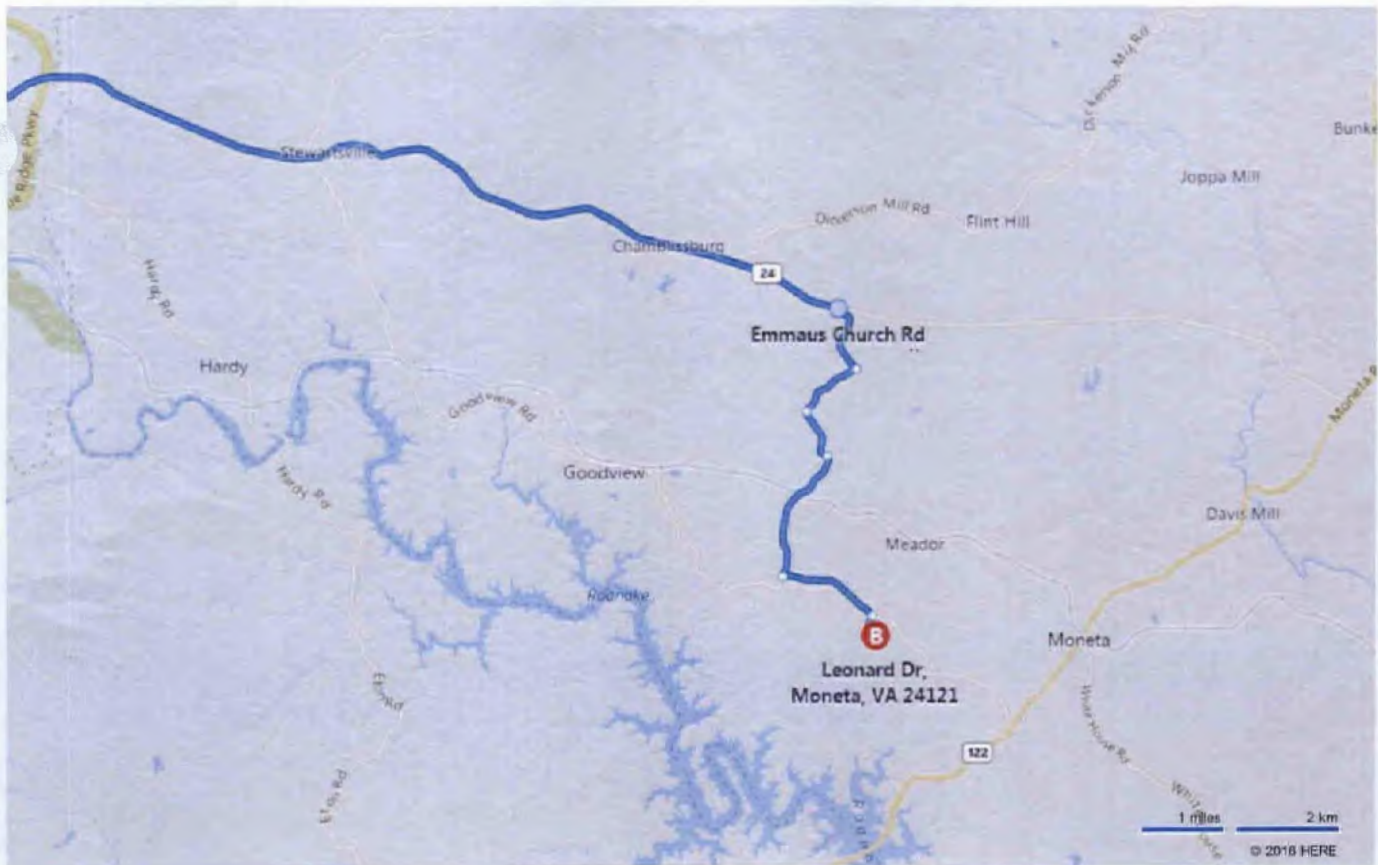
Light traffic (44 min without traffic)

Via VA-24, VA-24 E

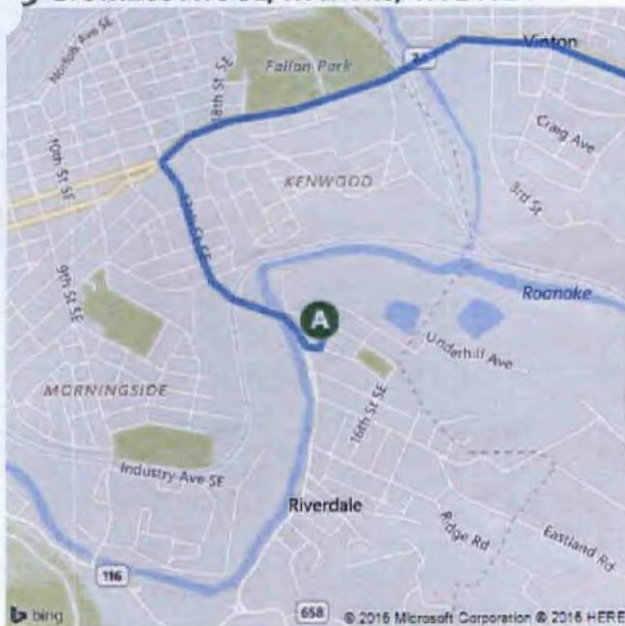
Calvin Godsey Farm
RO 82

Ⓐ **Brownlee Ave SE, Roanoke, VA 24014**

↑	1. Depart Brownlee Ave SE toward Kindred St SE	161 ft
↗	2. Turn right onto Kindred St SE	479 ft
↗	3. Turn right onto Carlisle Ave SE , and then immediately turn right onto Bennington St SE	0.8 mi
↗	4. Turn right onto VA-24 Pass Hess in 1.0 mi	2.2 mi
↑	5. Keep left to stay on VA-24 E / Bypass Rd	0.4 mi
↗	6. Turn right to stay on VA-24 E Pass Exxon in 4.4 mi	12.4 mi, 17 min
↗	7. Turn right onto Emmaus Church Rd	0.9 mi
↗	8. Turn right onto Goodview Town Rd	0.9 mi
↖	9. Bear left onto Horseshoe Bend Rd	0.7 mi
↗	10. Turn right to stay on Horseshoe Bend Rd	1.8 mi
↖	11. Turn left onto Diamond Hill Rd CITGO on the corner	1.3 mi
↗	12. Turn right onto Leonard Dr • Private Road • Unpaved Road	0.3 mi
	13. Arrive at Leonard Dr The last intersection is Wooded Acres Ln	



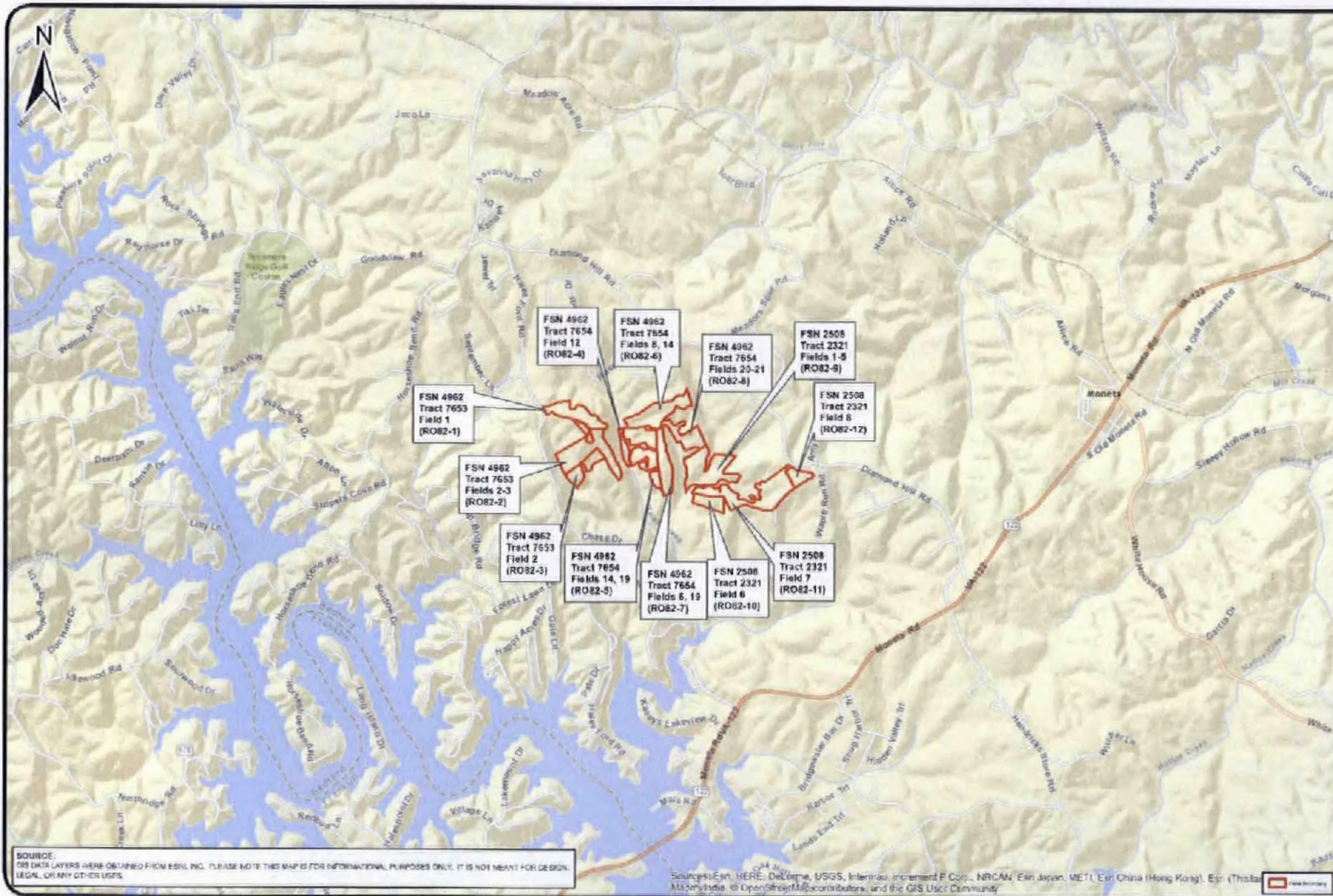
A Brownlee Ave SE, Roanoke, VA 24014



B Leonard Dr, Moneta, VA 24121




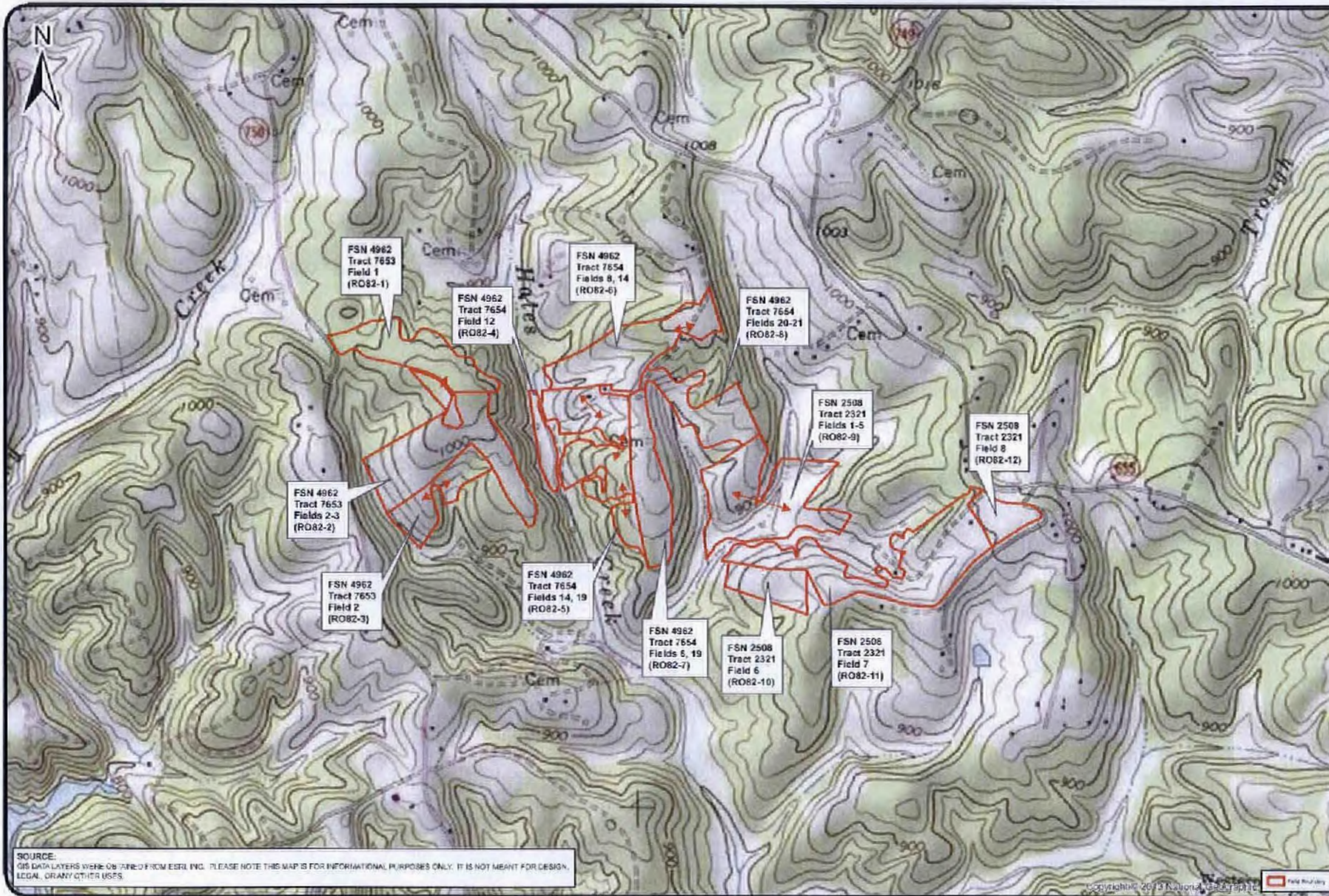
These directions are subject to the Microsoft® Service Agreement and are for informational purposes only. No guarantee is made regarding their completeness or accuracy. Construction projects, traffic, or other events may cause actual conditions to differ from these results. Map and traffic data © 2016 HERE™.




SOURCE:
GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN,
LEGAL, OR ANY OTHER USES.

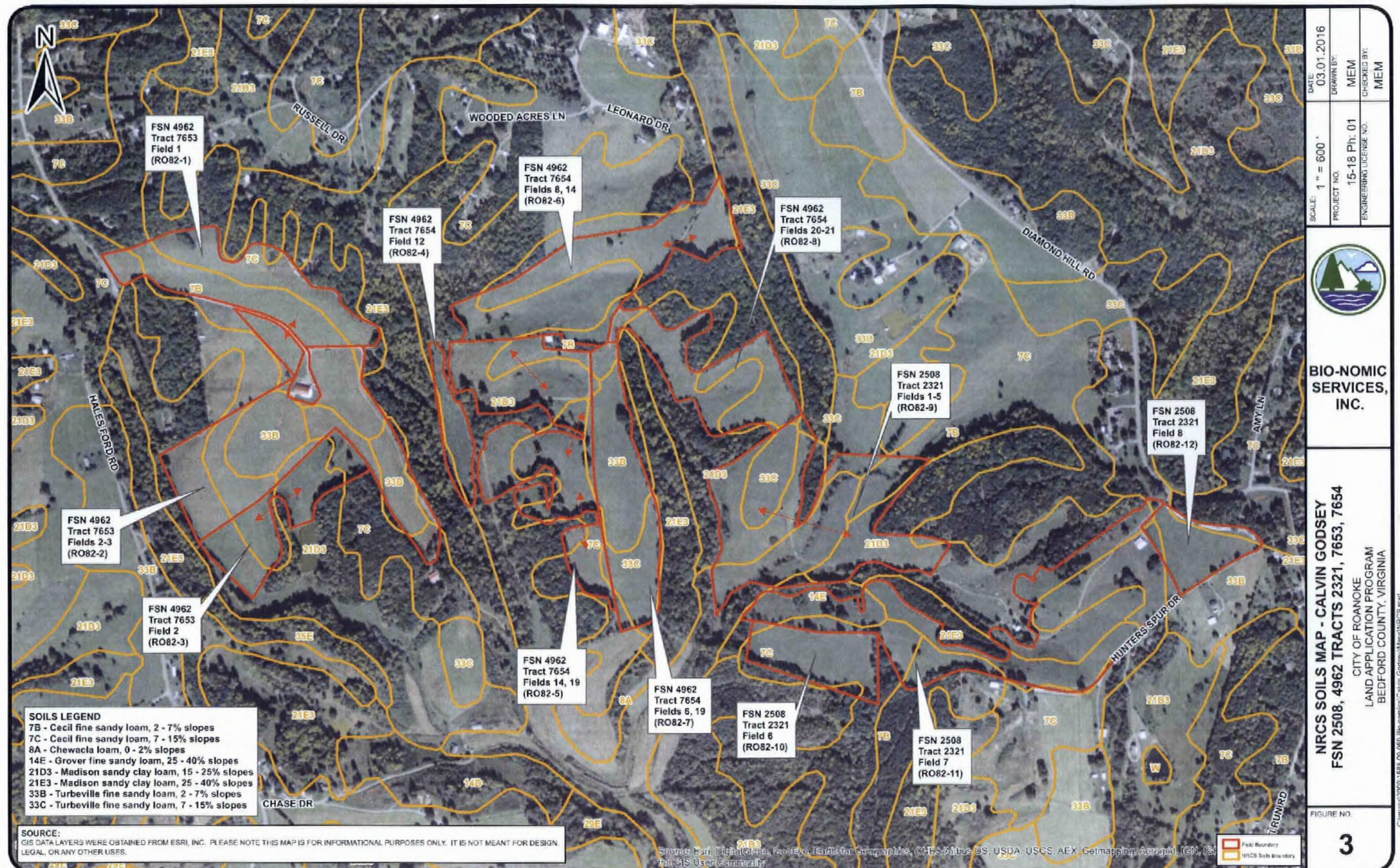
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand),
Switzerland, OpenStreetMap contributors, and the GIS User Community

 BIO-NOMIC SERVICES, INC.	DATE	03.01.2016
	SCALE	1" = 0.5 miles
	PROJECT NO.	15-18 Ph. 01
	ENGINEERING LICENSE NO.	MEM
USGS TOPOGRAPHY MAP - CALVIN GODSEY FSN 2508, 4962 TRACTS 2321, 7653, 7654 CITY OF ROANOKE LAND APPLICATION PROGRAM BEDFORD COUNTY, VIRGINIA		
FIGURE NO.	1	

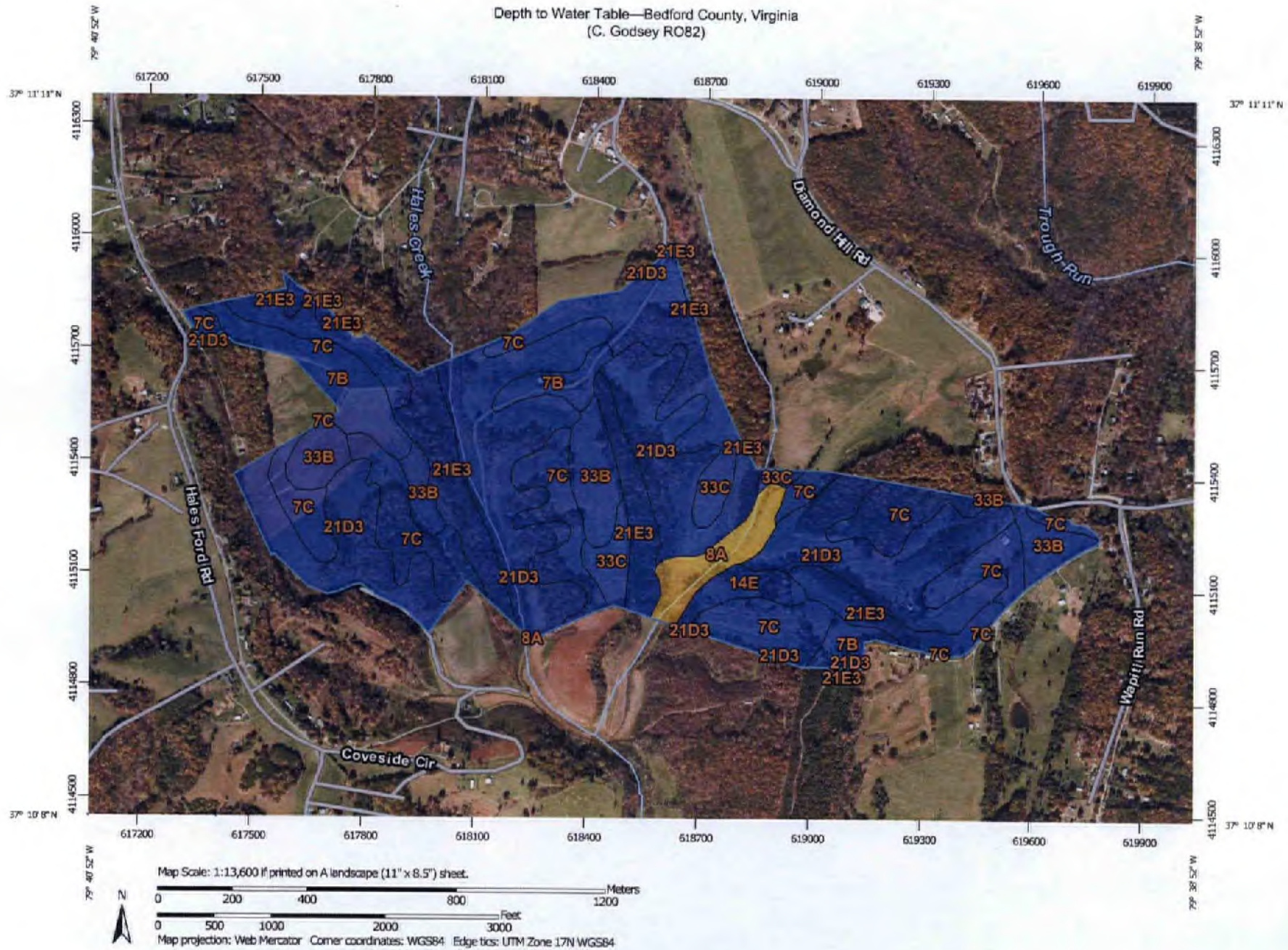


SOURCE:
GIS DATA LAYERS WERE OBTAINED FROM ESRI INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN,
LEGAL, OR ANY OTHER USES.

DATE	03.01.2016
SCALE	1" = 1,000'
PROJ. NO.	15-18 Ph. 01
ENGINEERING LICENSE NO.	MEM
CHECKED BY	MEM
MEM	
	
BIO-NOMIC SERVICES, INC.	
USGS TOPOGRAPHY MAP - CALVIN GODSEY FSN 2508, 4962 TRACTS 2321, 7653, 7654 CITY OF ROANOKE LAND APPLICATION PROGRAM BEDFORD COUNTY, VIRGINIA	
FEATURE NO.	2




Depth to Water Table—Bedford County, Virginia
(C. Godsey RO82)



Depth to Water Table—Bedford County, Virginia
(C. Godsey R082)

MAP LEGEND

Area of Interest (AOI)	 Area of Interest (AOI)	 Not rated or not available
Soils		Water Features
Soil Rating Polygons		 Streams and Canals
 0 - 25		Transportation
 25 - 50		 Rails
 50 - 100		 Interstate Highways
 100 - 150		 US Routes
 150 - 200		 Major Roads
 > 200		 Local Roads
 Not rated or not available		Background
Soil Rating Lines		 Aerial Photography
 0 - 25		
 25 - 50		
 50 - 100		
 100 - 150		
 150 - 200		
 > 200		
 Not rated or not available		
Soil Rating Points		
 0 - 25		
 25 - 50		
 50 - 100		
 100 - 150		
 150 - 200		
 > 200		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bedford County, Virginia
Survey Area Data: Version 11, Dec 11, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2010—Mar 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Water Table

Depth to Water Table— Summary by Map Unit — Bedford County, Virginia (VA019)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
7B	Cecil fine sandy loam, 2 to 7 percent slopes	>200	24.8	7.5%
7C	Cecil fine sandy loam, 7 to 15 percent slopes	>200	98.3	29.5%
8A	Chewacla loam, 0 to 2 percent slopes	31	10.2	3.1%
14E	Grover fine sandy loam, 25 to 40 percent slopes	>200	6.3	1.9%
21D3	Madison sandy clay loam, 15 to 25 percent slopes, severely eroded	>200	122.2	36.7%
21E3	Madison sandy clay loam, 25 to 40 percent slopes, severely eroded	>200	37.1	11.1%
33B	Turbeville fine sandy loam, 2 to 7 percent slopes	>200	24.5	7.4%
33C	Turbeville fine sandy loam, 7 to 15 percent slopes	>200	10.1	3.0%
Totals for Area of Interest			333.4	100.0%

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

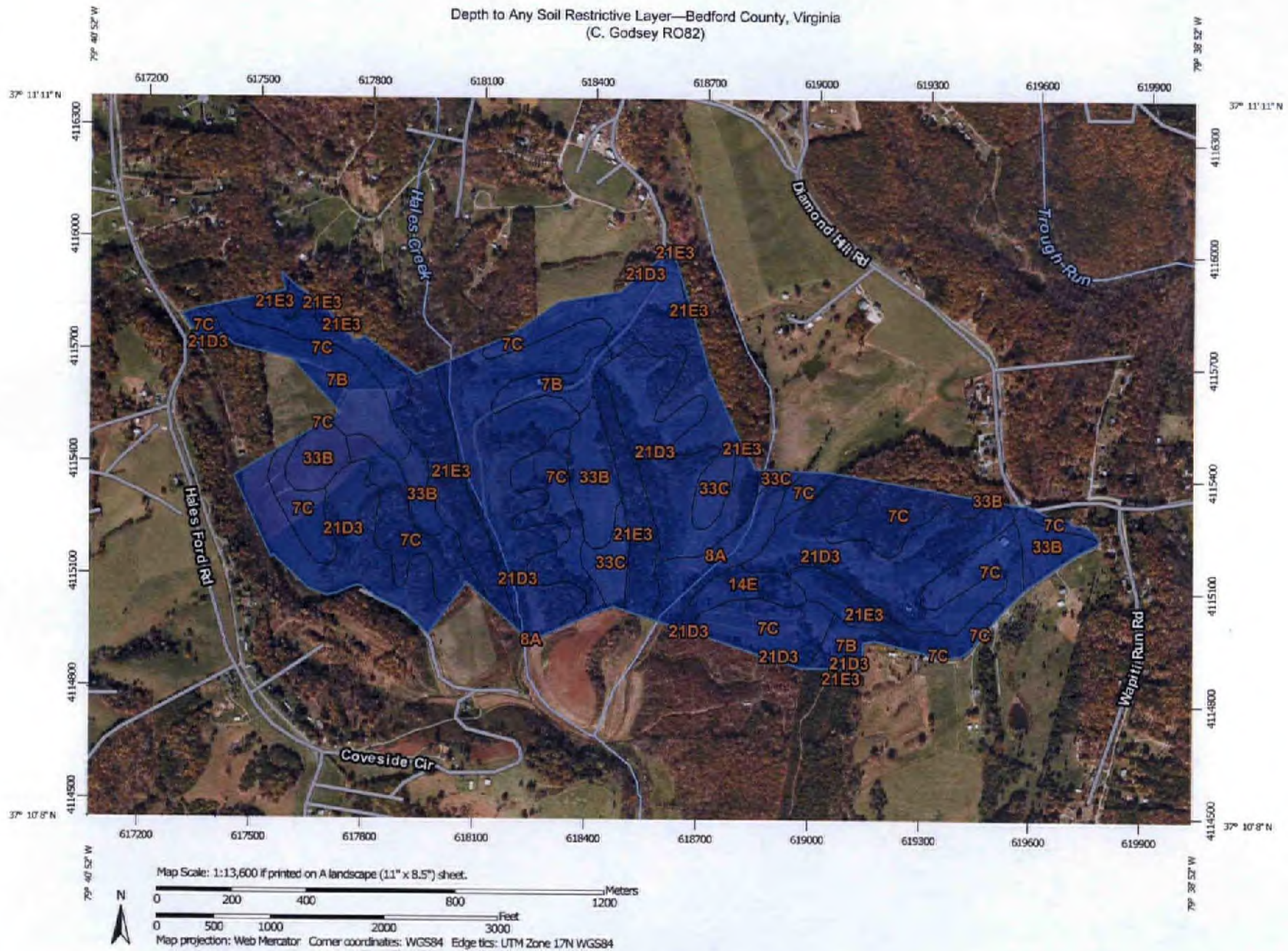
Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Depth to Any Soil Restrictive Layer—Bedford County, Virginia
(C. Godsey RO82)



Natural Resources
Conservation Service


Web Soil Survey
National Cooperative Soil Survey

2/25/2016
Page 1 of 4

Depth to Any Soil Restrictive Layer—Bedford County, Virginia
(C. Godsey R082)







MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Lines


-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Points

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200

 Not rated or not available


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bedford County, Virginia
Survey Area Data: Version 11, Dec 11, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2010—Mar 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Any Soil Restrictive Layer

Depth to Any Soil Restrictive Layer— Summary by Map Unit — Bedford County, Virginia (VA019)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
7B	Cecil fine sandy loam, 2 to 7 percent slopes	>200	24.8	7.5%
7C	Cecil fine sandy loam, 7 to 15 percent slopes	>200	98.3	29.5%
8A	Chewacla loam, 0 to 2 percent slopes	>200	10.2	3.1%
14E	Grover fine sandy loam, 25 to 40 percent slopes	>200	6.3	1.9%
21D3	Madison sandy clay loam, 15 to 25 percent slopes, severely eroded	>200	122.2	36.7%
21E3	Madison sandy clay loam, 25 to 40 percent slopes, severely eroded	>200	37.1	11.1%
33B	Turbeville fine sandy loam, 2 to 7 percent slopes	>200	24.5	7.4%
33C	Turbeville fine sandy loam, 7 to 15 percent slopes	>200	10.1	3.0%
Totals for Area of Interest			333.4	100.0%

Description

A "restrictive layer" is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers.

This theme presents the depth to any type of restrictive layer that is described for each map unit. If more than one type of restrictive layer is described for an individual soil type, the depth to the shallowest one is presented. If no restrictive layer is described in a map unit, it is represented by the "> 200" depth class.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No



FIELD	TOTAL ACRES	BUFFERED ACRES	NET ACRES	FIELD	TOTAL ACRES	BUFFERED ACRES	NET ACRES
RO82-1	17.2	6.8	10.4	RO82-7	13.8	0.6	13.2
RO82-2	25.4	7.6	17.8	RO82-8	12.3	4.1	8.2
RO82-3	9.7	3.1	6.6	RO82-9	27.6	16.1	11.5
RO82-4	3.6	2.3	1.3	RO82-10	7.7	2.3	5.4
RO82-5	23.3	8.8	14.5	RO82-11	45.1	17.3	27.8
RO82-6	20.5	10.6	9.9	RO82-12	6.0	2.4	3.6

SOURCE:
GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

DATE: 03.30.2016
DRAWN BY: MEM
CHECKED BY: MEM

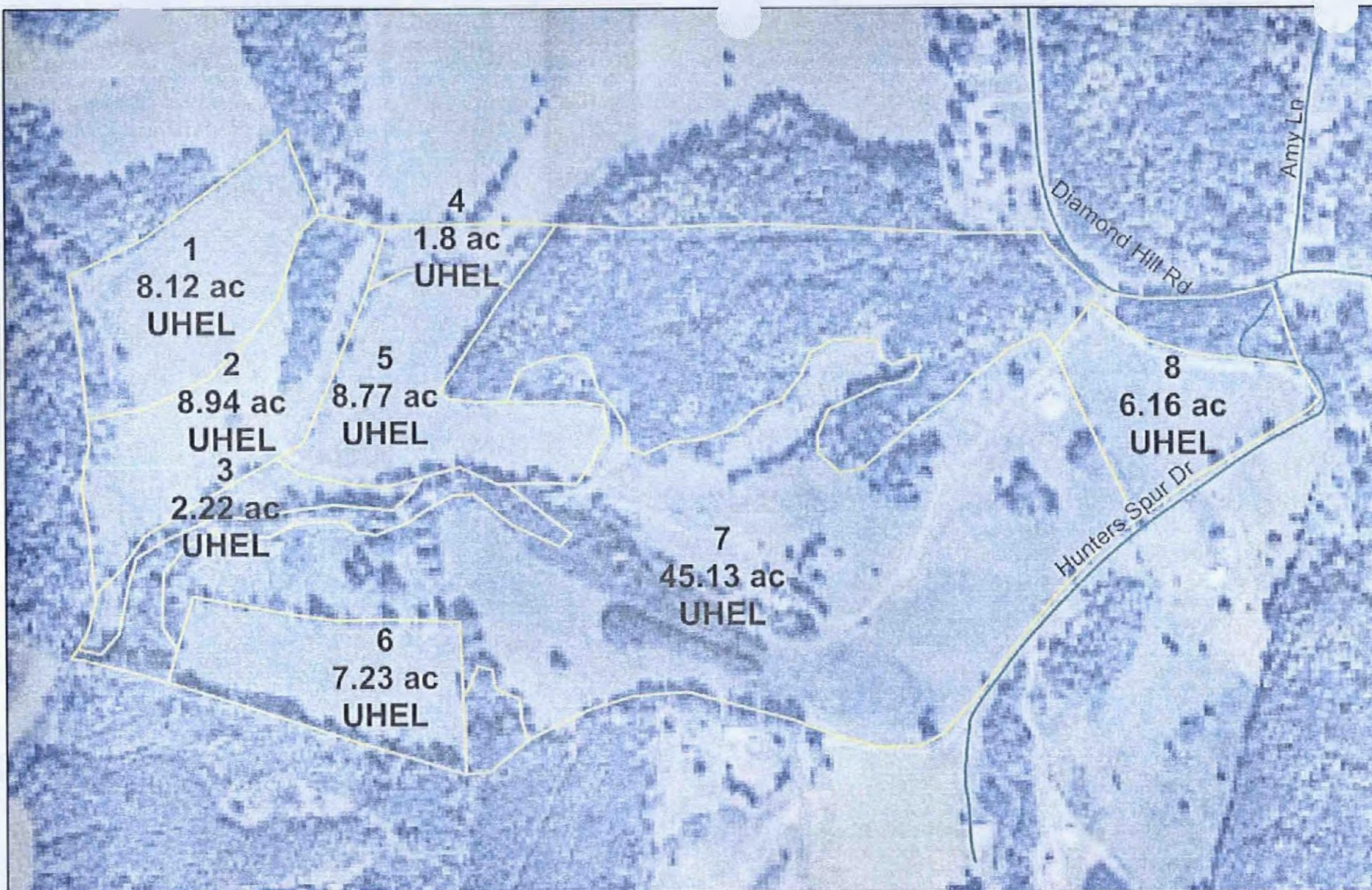
SCALE: 1" = 600'
PROJECT NO.: 15-18 Ph: 01
ENGINEERING LICENSE NO.:

BIO-NOMIC SERVICES, INC.

BUFFER MAP - CALVIN GODSEY
FSN 2508, 4962 TRACTS 2321, 7653, 7654
CITY OF ROANOKE
LAND APPLICATION PROGRAM
BEDFORD COUNTY, VIRGINIA

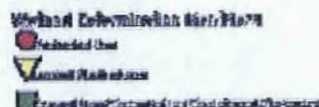
FIGURE NO.
4

C:\arcgis\2009\1508-09-059 Bio-nomics\Calvin Godsey\Mapa\Buffer.mxd



1 inch = 401 feet

Farm: 2508
Tract: 2321

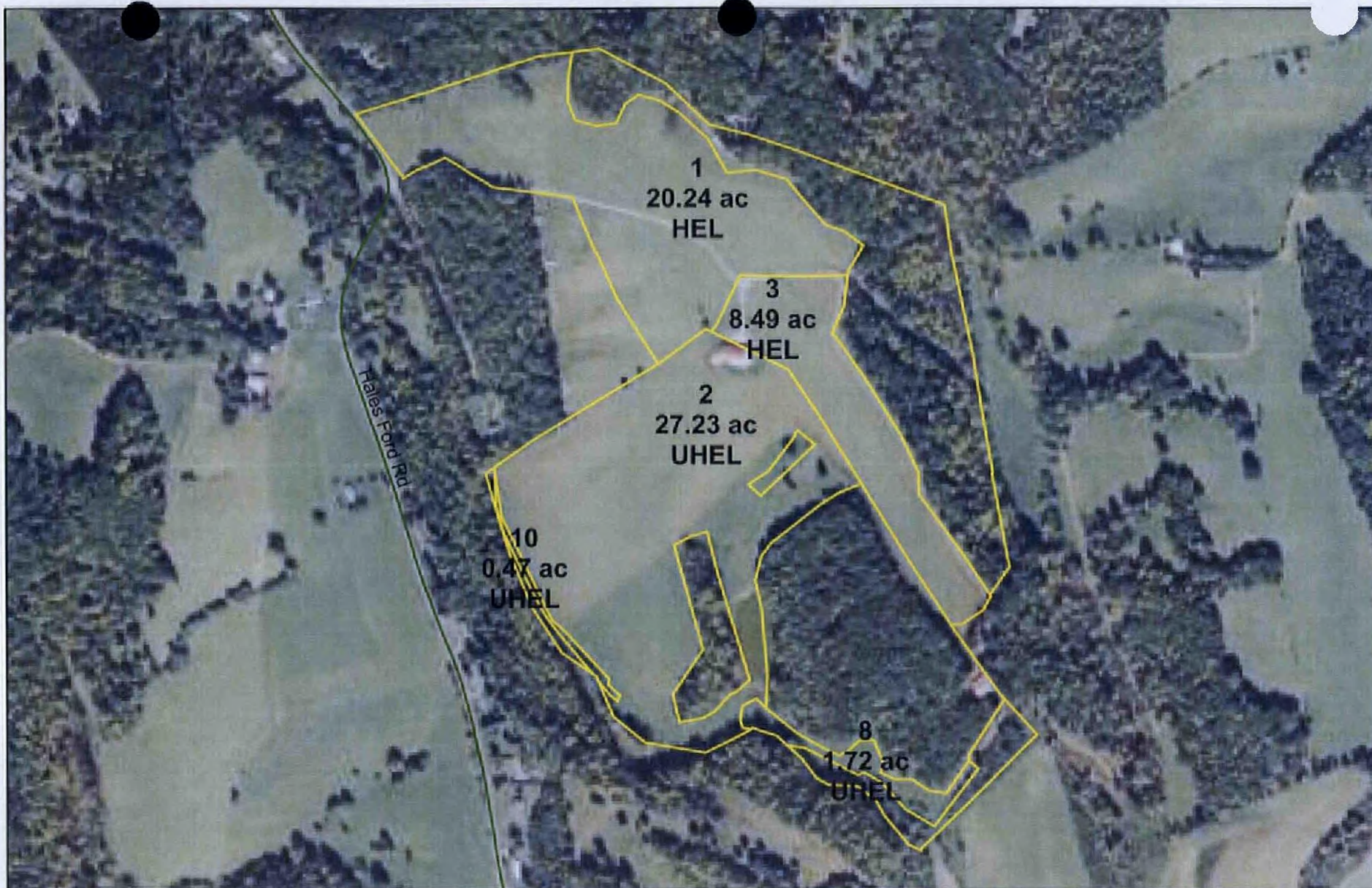


Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



Bedford County, VA

Jan. 13, 2016



1 inch = 495 feet

Farm: 4962
Tract: 7653



Bedford County, VA

Wetland Determination Map
 Reduced Use
 Limited Use
 No Wetlands

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

Jan 4, 2016



1 inch = 561 feet

Farm: 4962
Tract: 7654

Wetland Determination Map

- Wetland Use
- ▲ Wetland Boundary
- Wetland Determination Map

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



Bedford County, VA

Jan 4, 2016

Report Number: 16-098-0531

Account Number: 45671



"Every acre...Every year."™

7621 Whitepine Road, Richmond, VA 23237
Main 804-743-9401 • Fax 804-271-6446
www.waypointanalytical.com

Send To: BIO-NOMIC SERVICES INC
Joel Coert
516 ROUNDTREE RD
CHARLOTTE NC 28217

Grower: GODSEY

Submitted By: DON GREENE
Farm ID: RO 82

SOIL ANALYSIS REPORT

Analytical Method(s): Lime Index Mehlich 3 Loss On Ignition Water pH

Date Received: 04/07/2016

Date Of Analysis: 04/08/2016

Date Of Report: 04/08/2016

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
82-1	06880	5.4 H	MIN	144	54 H NC = 45			53 VL NC = 27	145 M	1494 H		6.3		1.0	9.8
82-2	06881	3.4 M	MIN	106	28 L NC = 23			36 VL NC = 18	115 M	1315 H		6.6		0.5	8.1
82-3	06882	2.9 M	MIN	99	9 VL NC = 7			199 VH NC = 102	140 H	818 M		6.3		0.7	6.5
82-4	06883	3.9 M	MIN	119	32 M NC = 27			60 L NC = 31	119 H	854 M		5.9	6.82	1.1	6.5
82-5	06884	4.1 M	MIN	120	22 L NC = 18			102 M NC = 52	267 VH	1114 M		6.9		0.1	8.2

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
82-1	1.4	12.3	76.2		10.2										
82-2	1.1	11.8	81.2		6.2										
82-3	7.9	17.9	62.9		10.8										
82-4	2.4	15.3	65.7		16.9										
82-5	3.2	27.1	67.9		1.2										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Pauric McGeary*

Pauric McGeary

Report Number: 16-098-0531

Account Number: 45671



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Sample ID Field ID	Lab Number.	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
82-6	06885	7.0 VH	MIN	150	18 L NC = 15			132 M NC = 68	288 H	1301 M		6.0	6.76	1.7	10.9
82-7	06886	3.5 M	MIN	107	16 L NC = 13			35 VL NC = 18	285 VH	1307 H		6.9		0.1	9.1
82-8	06887	5.8 H	MIN	150	5 VL NC = 4			43 VL NC = 22	260 VH	1010 M		6.5		0.6	7.9
82-9	06888	5.9 H	MIN	150	19 L NC = 16			70 L NC = 36	231 H	1317 M		5.9	6.75	1.8	10.5
82-10	06890	3.2 M	MIN	103	3 VL NC = 2			43 VL NC = 22	178 H	940 M		6.0	6.82	1.1	7.4

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
82-6	3.1	22.0	59.7		15.6										
82-7	1.0	26.1	71.8		1.1										
82-8	1.4	27.4	63.9		7.6										
82-9	1.7	18.3	62.7		17.1										
82-10	1.5	20.0	63.5		14.9										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

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Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Pauric McGroary*

Pauric McGroary

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		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm	Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
82-11	06891	4.1 M	MIN	121	16 L NC = 13			205 VH NC = 105	138 M	941 M		5.9	6.80	1.3	7.7
82-12	06892	2.6 M	MIN	95	25 L NC = 21			23 VL NC = 12	79 M	641 M		5.6	6.81	1.2	5.1

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
82-11	6.8	14.9	61.1		16.9										
82-12	1.2	12.9	62.8		23.5										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

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Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGeary*

Paucic McGeary